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09/518,099	03/03/2000	Tatsuro Akabane	Q58148	5409

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EXAMINER

TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/518,099

Applicant(s)

AKABANE ET AL.

Examiner

Douglas Q. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 13, 17-31 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13, 17-31 and 33-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8, 13, 17-31, 33-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Tang (US Patent No. 6,160,629).

As to claim 4, Tang discloses a print system comprises:

a computer (12 in fig. 2); comprising a logical printer driver (18 in fig. 2) for making print instruction of a prepared document, preparing a PDL document and print instruction (i.e., a job retention feature) from the document, and spooling as a print job (col. 3, line 57 to col. 4, line 4), wherein:

the printer (10 in fig. 2) is connected to the computer (12 in fig. 2), and comprises:

a spool control section (22 in fig. 3) for receiving the spooled print job (the controller has the input buffer for receiving the spooled print job);

an archive (i.e., the printer's disk driver) for storing the print job (col. 4, lines 37-39);

an interpreter (i.e., a personality 36 in fig. 3) for interpreting the PDL document and expanding the PDL document into a dot image (i.e., a rasterized data stream, col. 4, lines 21-26):

an output work (i.e., RAM 32 in fig. 3) for storing the dot image (i.e., col. 4, line 33);

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an output control section (i.e., a controller 22 in fig. 3) for controlling storage of the dot image stored in the output work and the print information in the archive as the print job (col. 4, lines 35-36 and 48-50).

As to claim 1, Tang teaches a print system comprising:

a computer (12 in fig. 2); comprising a logical printer driver (18 in fig. 2) for making print instruction of a prepared document, preparing a PDL document and print instruction (i.e., a job retention feature) from the document, and spooling as a print job (col. 3, line 57 to col. 4, line 4), wherein the print information comprises storage data indicating whether the print job is to be archived in a printer (col. 4, lines 37-40: Job retention for indicating the print job would be stored in the printer) and storage format data indicating in what format the print job should be archived (col. 4, lines 48-50: the print job is stored in either data file "i.e., PDL document and Job retention or the print instruction" before it is rendered to a rasterized image data or as a rasterized image file "i.e., the dot image format with job retention or the print instruction", wherein:

the printer (10 in fig. 2) is connected to the computer (12 in fig. 2), and comprises:

a spool control section (22 in fig. 3) for receiving the spooled print job (the controller has the input buffer for receiving the spooled print job);

a PDL processing section (i.e., a personality 36 in fig. 3) for processing the PDL document in accordance with the print information of the print job (col. 4, lines 21-26);

an interpreter (i.e., a personality 36 in fig. 3) for interpreting the PDL document and expanding the PDL document into a dot image (i.e., a rasterized data stream, col. 4, lines 21-26):

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an output work (i.e., RAM 32 in fig. 3) for storing the dot image (i.e., col. 4, line 33);
an output control section (i.e., a controller 22 in fig. 3) for controlling the output work
(col. 4, lines 35-36); and
a printer engine (20 in fig. 3) for printing the dot image transmitted from the output
control section;

wherein the document is printed in a format specified by the computer (col. 4, lines 48-
50: the document, which is printed, would inherently be in a raster format).

As to claim 2, Tang discloses every feature discussed in claim 1, and Tang further
teaches the computer (12 in fig. 2) further comprises a print instruction section (i.e., printer
driver 18) for updating the print information of the print job and making print instructions (col. 3,
line 66 to col. 4, line 2), and

the printer (10 in fig. 2) further comprises an archive for storing the print job from the
spool control section, and an archive control section for spooling the print job from the print
instruction section (col. 4, lines 37-40).

As to claim 3, Tang discloses every feature discussed in claim 1, and Tang further
teaches an archive for storing a pair of PDL document and printer information and a pair of dot
image and print information as the print job (col. 4, lines 48-50).

As to claim 5, Tang discloses every feature discussed in claim 4, and Tang further
teaches a print instruction section (i.e., printer driver 18) for updating the print information of the
print job and making print instructions (col. 3, line 66 to col. 4, line 2), and

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the printer (10 in fig. 2) further comprises an archive for storing the print job from the spool control section, and an archive control section for spooling the print job from the print instruction section (col. 4, lines 37-40).

As to claim 6, Tang discloses every feature discussed in claim 4, and Tang further teaches the archive stores a pair of PDL document and printer information and a pair of dot image and print information as the print job (col. 4, lines 48-50).

As to claim 7, Tang teaches a print system comprising:

a computer (12 in fig. 2); comprising a logical printer driver (18 in fig. 2) for making print instruction of a prepared document, preparing a PDL document and print instruction (i.e., a job retention feature) from the document, and spooling as a print job (col. 3, line 57 to col. 4, line 4), wherein the print information comprises storage data indicating whether the print job is to be archived in a printer (col. 4, lines 37-40: Job retention for indicating the print job would be stored in the printer) and storage format data indicating in what format the print job should be archived (col. 4, lines 48-50: the print job is stored in either data file "i.e., PDL document and Job retention or the print instruction" before it is rendered to a rasterized image data or as a rasterized image file "i.e., the dot image format with job retention or the print instruction", wherein:

the printer (10 in fig. 2) is connected to the computer (12 in fig. 2), and comprises:

a spool control section (22 in fig. 3) for receiving the spooled print job (the controller has the input buffer for receiving the spooled print job);

a PDL processing section (i.e., a personality 36 in fig. 3) for processing the PDL document in accordance with the print information of the print job (col. 4, lines 21-26);

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an interpreter (i.e., a personality 36 in fig. 3) for interpreting the PDL document and expanding the PDL document into a dot image (i.e., a rasterized data stream, col. 4, lines 21-26):

an output work (i.e., RAM 32 in fig. 3) for storing the dot image (i.e., col. 4, line 33);

an output control section (i.e., a controller 22 in fig. 3) for controlling the output work (col. 4, lines 35-36); and

an archive (i.e., the printer's disk driver) for storing the print job (col. 4, lines 37-39).

As to claim 8, Tang discloses every feature discussed in claim 7, and Tang further teaches the archive stores a pair of PDL document and printer information and a pair of dot image and print information as the print job (col. 4, lines 48-50).

As to claim 13, Tang discloses a print system comprises:

a computer (12 in fig. 2); and

a printer (10 in fig. 2) connected directly or indirectly to the computer via a network (14 in fig. 2)

wherein the computer comprising a logical printer driver (18 in fig. 2) for making print instruction of a prepared document, preparing a PDL document and print instruction (i.e., a job retention feature) from the document, and spooling as a print job (col. 3, line 57 to col. 4, line 4),

wherein the printer comprising:

a spool control section (22 in fig. 3) for receiving the spooled print job (the controller has the input buffer for receiving the spooled print job);

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a PDL processing section (i.e., a personality 36 in fig. 3) for processing the PDL document in accordance with the print information of the print job (col. 4, lines 21-26);

an interpreter (i.e., a personality 36 in fig. 3) for interpreting the PDL document and expanding the PDL document into a dot image (i.e., a rasterized data stream, col. 4, lines 21-26);

an output work (i.e., RAM 32 in fig. 3) for storing the dot image (i.e., col. 4, line 33);

an output control section (i.e., a controller 22 in fig. 3) for controlling the output work (col. 4, lines 35-36);

a printer engine (20 in fig. 3) for printing the dot image transmitted from the output control section (22 in fig. 3);

wherein the document is printed in a format specified by the computer (col. 4, lines 48-50: the document, which is printed, would inherently be in a raster format);

the print system further including an archive (i.e., the printer's disk driver) for storing a pair of PDL document and printer information and a pair of dot image and print information as the print job (col. 4, lines 35-39 and 48-50).

As to claim 17, Tang discloses a print system comprises:

a computer (12 in fig. 2); and

a printer (10 in fig. 2) connected directly or indirectly to the computer via a network (14 in fig. 2)

wherein the computer comprising a logical printer driver (18 in fig. 2) for making print instruction of a prepared document, preparing a PDL document and print instruction (i.e., a job retention feature) from the document, and spooling as a print job (col. 3, line 57 to col. 4, line 4),

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wherein the printer comprising:

a spool control section (22 in fig. 3) for receiving the spooled print job (the controller has the input buffer for receiving the spooled print job);

a PDL processing section (i.e., a personality 36 in fig. 3) for processing the PDL document in accordance with the print information of the print job (col. 4, lines 21-26);

an interpreter (i.e., a personality 36 in fig. 3) for interpreting the PDL document and expanding the PDL document into a dot image (i.e., a rasterized data stream, col. 4, lines 21-26);

a dot image processing section (i.e., a personality 36 in fig. 3) for processing the dot image (i.e., a rasterized data stream, col. 4, lines 21-26);

an output work (i.e., RAM 32 in fig. 3) for storing the dot image (i.e., col. 4, line 33);

an output control section (i.e., a controller 22 in fig. 3) for controlling the output work (col. 4, lines 35-36);

an archive (i.e., the printer's disk driver) for storing the print job (col. 4, lines 37-39) wherein the archive for storing a pair of PDL document and printer information and storing a pair of dot image and print information as the print job (col. 4, lines 35-39 and 48-50).

As to claim 18, Tang discloses a print system comprises:

a computer (12 in fig. 2); and

a printer (10 in fig. 2) connected directly or indirectly to the computer via a network (14 in fig. 2)

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wherein the computer comprising a logical printer driver (18 in fig. 2) for making print instruction of a prepared document, preparing a PDL document and print instruction (i.e., a job retention feature) from the document, and spooling as a print job (col. 3, line 57 to col. 4, line 4),

wherein the printer comprising:

a spool control section (22 in fig. 3) for receiving the spooled print job (the controller has the input buffer for receiving the spooled print job);

a PDL processing section (i.e., a personality 36 in fig. 3) for processing the PDL document in accordance with the print information of the print job (col. 4, lines 21-26);

an interpreter (i.e., a personality 36 in fig. 3) for interpreting the PDL document and expanding the PDL document into a dot image (i.e., a rasterized data stream, col. 4, lines 21-26);

a dot image processing section (i.e., a personality 36 in fig. 3) for processing the dot image (i.e., a rasterized data stream, col. 4, lines 21-26);

an output work (i.e., RAM 32 in fig. 3) for storing the dot image (i.e., col. 4, line 33);

an output control section (i.e., a controller 22 in fig. 3) for controlling the output work (col. 4, lines 35-36);

an archive (i.e., the printer's disk driver) for storing the print job (col. 4, lines 37-39),

wherein the output control section also controls the storing of the dot image stored in the output work and print information in the print archive as the print job (col. 4, lines 35-39 and 48-50).

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As to claim 19, Tang discloses every feature discussed in claim 1, and Tang further teaches the print information further comprises at least of number of copies data indicating the number of copies desired (col. 5, lines 47-49).

As to claim 20, Tang discloses every feature discussed in claim 4, and Tang further teaches the print information further comprises at least of number of copies data indicating the number of copies desired (col. 5, lines 47-49).

As to claim 21, Tang discloses every feature discussed in claim 7, and Tang further teaches the print information further comprises at least of number of copies data indicating the number of copies desired (col. 5, lines 47-49).

As to claim 22, Tang discloses every feature discussed in claim 1, and Tang teaches the printer further comprises an archive for storing the print job based on a value of the storage data; and the print information of the print job stored in the archive can be updated by the computer; and stored print job can be printed according to the updated print information (please see fig. 4C and col. 4, lines 48-50; Therefore, the print job can be updated anytime for the new print job with additional copies, col. 5, lines 1-3; col. 3, line 66 to col. 4, line 2).

As to claim 23, Tang discloses every feature discussed in claim 4, and Tang teaches the printer further comprises an archive for storing the print job based on a value of the storage data; and the print information of the print job stored in the archive can be updated by the computer; and stored print job can be printed according to the updated print information (please see fig. 4C and col. 4, lines 48-50; Therefore, the print job can be updated anytime for the new print job with additional copies, col. 5, lines 1-3; col. 3, line 66 to col. 4, line 2).

As to claim 24, Tang discloses every feature discussed in claim 7, and Tang further teaches the printer further comprises an archive for storing the print job based on a value of the storage data; and the print information of the print job stored in the archive can be updated by the computer; and stored print job can be printed according to the updated print information (please see fig. 4C and col. 4, lines 48-50; Therefore, the print job can be updated anytime for the new print job with additional copies, col. 5, lines 1-3; col. 3, line 66 to col. 4, line 2).

As to claim 25, Tang discloses every feature discussed in claim 7, and Tang further teaches a PDL processing section for processing the PDL document in accordance with the print information of the print job; wherein the archive also stored a PDL document for later retrieval.

As to claim 27, Tang teaches an archive for storing a pair of PDL and print information and a pair of dot image and/or print information as the print job (please see fig. 4C and col. 4, lines 48-50).

As to claims 4-6 and 25, due to the similarities of these claims to those of claims 1 and 3, these claims are rejected as the reasons from claims 1 and 3.

As to claims 7-8 and 26, due to the similarities of these claims to those of claims 1 and 3, these claims are rejected as the reasons from claims 1 and 3.

As to claims 13, 17, 18, due to the similarities of these claims to those of claims 1 and 3, these claims are rejected as the reasons from claims 1 and 3.

As to claim 19, the combination of system teaches every feature in claim 1, and the feature of the print information comprises an attributes for the print job which is well known in the prior art when the user creates the print job.

As to claims 30 and 31, Tang teaches the storage data and storage format data are chosen by a user through an interface in the computer (fig. 4C).

As to claim 33, Tang discloses every feature discussed in claim 1, and Tang further teaches the print information associated with the PDL document is replaceable (col. 4, lines 50-54 and col. 5, lines 1-3 and 13-16).

As to claim 34, Tang discloses every feature discussed in claim 1, and Tang further teaches the storage format data indicates whether the print job should be stored in a PDL format or a dot image format (col. 4, lines 48-50).

As to claim 35, Tang discloses every feature discussed in claim 4, and Tang further teaches the print information associated with the PDL document is replaceable (col. 4, lines 50-54 and col. 5, lines 1-3 and 13-16).

As to claim 36, Tang discloses every feature discussed in claim 4, and Tang further teaches the storage format data indicates whether the print job should be stored in a PDL format or a dot image format (col. 4, lines 48-50).

As to claim 37, Tang discloses every feature discussed in claim 4, and Tang further teaches the print information comprises storage data indicating whether the print job is to be archived in the printer and storage format data indicating in what format the print job should be archived (please see fig. 4D and col. 4, lines 48-50).

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As to claim 38, Tang discloses every feature discussed in claim 7, and Tang further teaches the print information associated with the PDL document is replaceable (col. 4, lines 48-50).

As to claim 39, Tang discloses every feature discussed in claim 7, and Tang further teaches the storage format data indicates whether the print job should be stored in a PDL format or a dot image format (please see fig. 4D and col. 4, lines 48-50).

As to claim 40, Tang discloses every feature discussed in claim 7, and Tang further teaches the dot image processing section and the PDL processing section (36 in fig. 3) are arranged in parallel between the spool control section and the output work (32 and 40 in fig. 3).

Response to Arguments

Applicant's arguments with respect to *elected* claims 1-8, 13, 17-31, 33-40 have been considered but are moot in view of the new ground(s) of rejection. This action is made **non-final**.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
May 25, 2004

